Nebraska IMPs Key Issues to Consider NKAO – Sept 2010

Goals and Objectives:

- 1. Groundwater and Surface Water Protection and Sustainability. The main goal of the Integrated Management Plans (IMPs) should be to provide effective conjunctive management of surface water and groundwater use to ensure that these vital resources are protected and sustained. To accomplish this, groundwater use must be reduced to a level that prevents groundwater mining and allow the groundwater level and surface water flows to start a gradual recovery. Providing sustainability should be a primary goal for each NRD as well as the basin as a whole. Meeting Compact compliance should be a secondary goal of the IMPs after first meeting the goal of sustainability. Meeting the goal of sustainability will go a long way in providing Compact compliance and minimize the need for drastic measure during water short years.
- 2. Comply with the Terms of the Final Settlement Stipulation (FSS) Moratorium on New Wells. The first issue addressed in the FFS is a Moratorium on New Wells. The intent of this was to cap new development preventing an expansion of irrigated lands after 2002. It is our understanding that while no new wells were drilled after 2002, there were a large number of new irrigated lands added after 2002, under wells that had been previously drilled but not developed. It is Reclamation position that the development of any new lands after 2002 violates the intent of the FSS unless these lands replace existing irrigated lands taken out of production after 2002. The IMPs should address this issue and require that any new irrigated lands, developed after 2002, be curtailed or substituted for other lands that were in use prior to 2003.
- 3. Evaluate the basin to determine if basin is fully- or over-appropriated. The basin should be re-evaluated based on current scientific data to determine if the basin has become over-appropriated as defined by LB 962. We believe it is clear that the basin is over-appropriated as each year most surface water users receive only a portion of their needed supply. If the basin is scientifically proven to be over-appropriated then a determination of the amount of reduction in groundwater development needed to reach a fully appropriated status should be made. This would include addressing the stream flow depletions that cause Compact noncompliance by Nebraska.

Equity:

1. Method for Allocating Water Between NRDs: The first issue that should be addressed in determining an effective method for allocating water between the three NRDs is the need to have sustainability for each of the three NRDs. Since some areas are using groundwater at a much high rate than recharge, the reduction in use for this area may need to be higher than in other areas. While this may not appear to be equitable it is necessary to protect and sustain the future water resource for that area. The groundwater model should be used to the degree possible to determine what the



allowable level of use is for each of the NRDs that provides sustainability for both groundwater and surface water supplies. Once these values are determined then they should be used to develop a percentage allocation for each of the three NRDs. In addition, any imported water such as the water entering the Republican River from the groundwater mound in the Platte River Basin should be discounted before determining the allocation percentages. Since this imported water is not part of the natural supply, its benefit should be shared in an equitable fashion by all of the resource districts in the Republican River basin.

- Curtailment During Water Short Years: A method needs to be developed to ensure equity between users; curtailment of some while others continue to pump and in most cases continue to mine groundwater which adds to future problems doesn't address the real issue of an "over developed resource." It's obvious that just compensation in the short term needs to be provided; in addition an aggressive plan to reduce irrigated acres needs to be a top priority. A scientific evaluation of just how far Nebraska has overdeveloped would provide some useful information with understanding the severity of the problem. Either the water users that are curtailed need to be justly compensated for their loss of water or additional pumping restrictions across the basin need to be initiated now to reduce the need for the irrigated acres located near the river to unfairly make up the deficits in water short years. If monetary compensation cannot be provided then the water allocation for the non-curtailed acres should be set at a lower level then the acres near the river to provide long term equity between water users. The IMP should have exact details of how compensation will be provided, how much compensation is appropriate, and where the compensation will come from. Pumping allocations should be based both on the current and the future harm groundwater pumping has on an already depleted aquifer.
- 3. Recognition of Earlier Rights: Water users who developed and have beneficially used water for several decades should have a priority of use ahead of newer development, especially that development over the last 30 years. The water rights associated with the Federal projects is in most instances senior to other users in the basin. It is the water development since the late 1970s that has resulted in groundwater mining and out of compliance use by Nebraska not the earlier development. While this prior right is recognized between surface water users under the prior appropriation doctrine it has not been recognized for groundwater use. It is our understanding that the IMPs can be structured to provide some recognition of priority for groundwater use after July 1, 1997. To better provide equity groundwater users who developed their land after July 1, 1997 should have their use curtailed during water short years before curtailing the irrigated lands that were developed prior to 1997. For true equity all groundwater use which depletes stream flow and developed subsequent to surface waters uses should be curtailed before the surface water use. In the event that the ground water may continue out of priority, a compensation mechanism should be implemented on a willing seller willing buyer scheme.
- 4. <u>Water management outside the District Boundary</u>: Nebraska State Statutes 46-703.4 states: The Legislature recognizes that ground water use or surface water use in one natural resources district may have adverse affects on water supplies in another

district or in an adjoining state. The Legislature intends and expects that each natural resources district within which water use is causing external impacts will accept responsibility for ground water management in accordance with the Nebraska Ground Water Management and Protection Act in the same manner and to the same extent as if the impacts were contained within that district; NRDs need to take responsibility for harm caused to downstream water users in other District and adopt rules to restore equity or provide compensation for the damages. The IMPs should require restrictions in areas where the base flows have had the greatest decline.

- 5. Surface water stored in priority through the proper exercise of storage permits shall not be subject to a compact call. In addition, the bypass of inflows thru HCL invalidates the requirement of the FSS relative to the determination of a Water Short Year as well as the determination of the 130,000 AF irrigation supply. Bypassing inflows is contrary to the intent of the Consensus Plan and renders the calculation of water short years meaningless.
- 6. From a reservoir operation viewpoint, it is ill advised to pass water thru any basin reservoir based on a dry year projection. This is counter to the original intent and purpose of the Federal reservoirs and the historic operation of the Federal projects. Once the water is released downstream for non-project purposes there is no way to recover the lost storage and benefits should significant runoff events occur.

Use of Averages:

- 1. The averaging of water use that is consistent with the terms of the FSS is reasonable as long as it is managed in a way that facilitates Compact Compliance. Averaging should not be used in a manner that results in a need for larger water use reduction in water short year than would be required without the use of averages.
- 2. Allowing Water Use during Dry/Water Short Years: The IMPs should not allow a higher allocation during dry years. The IMPs should require basin wide reductions in GW use during dry/water short years as a necessary measure to ensure that Nebraska meets its Compact compliance.

Forecasting Water Supply and Determining Allowable Groundwater Depletions

1. Forecasting Water Supply/Depletion: A method for forecasting the water supply and depletions for the upcoming year should be incorporated as an integral part of the IMP as it is essential for meeting Compact compliance on a year by year basis. Consideration should be given to using 1997-2005 (rather than 1999-2005) for developing the forecast for surface water use which would provide a larger sample of years covering water use from the time the Nebraska reservoirs were at their greatest storage, following the flood year of 1996, through the drought period when reservoir storage was greatly depleted. Using this period of years results in as good or better correlation between reservoir storage and water use than the shorter period of time. Since 1996 was a flood year it is not a representative year for developing a correlation between reservoir storage and water use.

- 2. Allowable Groundwater Depletion: The principal proposed in the Upper and Middle IMPs for determining the Allowable Groundwater Depletion based on the need to limit groundwater use to a level that will provide Compact Compliance is a good start. We do, however, believe that this allocation should also be set based on providing a sustainable water supply for both surface and groundwater use.
- 3. <u>Surface Water Depletion:</u> Surface water use is limited by the naturally available water supply from year to year along with water availability under the prior appropriation doctrine. Surface water use is not allocated a supply as is groundwater use. To avoid confusion the term "allowable" should not be included in front of "surface water depletion" in the IMPs as was done in both the Upper and Middle NRDs IMPs.

Clarity/Defined Terms

To assist with clarity the IMPs should list and define all proper terms used in the IMP. Whenever one of these defined terms is used in the document it should be capitalized to indicate that the word(s) are used in the contents of a defined term.